

The Next Frontier of Space Software Engineering Challenges

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Panelists:

Unmanned Exploration (Bob Vargo/JPL)

Manned Missions (tbd)

Commercial (Hans Koenigsmann, VP Avionics & Systems, SpaceX)

Defense Industry (Bonnie Triezenberg, Boeing)

Academic (James Cutler/Stanford – CubeSat)

Abstract

The exploration of space is now a world wide effort possessing many dimensions: returning humans to the moon, sending robotic vehicles to very inhospitable places such as Venus or Europa, and pushing commercial, defense, and even academic self-built space systems to new limits. What are the

major software engineering barriers or challenges that lie ahead in each area? Are there any shared problems and common solutions? How do we make mission software more reusable, cheaper, and most of all, more reliable? This **panel** will explore these topics and more from different mission perspectives.